
WORK PLAN FOR SITE WIDE APPROACH UNDER THE ONE CLEANUP PROGRAM

SUNOCO MARCUS HOOK REFINERY MARCUS HOOK, PENNSYLVANIA



**Sunoco, Inc. (R&M)
100 Green Street
Marcus Hook, Pennsylvania**

**December 19, 2011
220027801**

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1.0 INTRODUCTION AND BACKGROUND

This Work Plan for a Site Wide Approach Under the One Cleanup Program (Work Plan) has been prepared by Sunoco, Inc. (R&M) (Sunoco) in support of the ongoing site wide remedial program at Sunoco's Marcus Hook Refinery (refinery) and is intended to serve as the road map to navigate the refinery through the Site Characterization and Remediation process to achieve site closure. The refinery is shown in Figure 1 of this Work Plan.

In April 2004, the Pennsylvania Department of Environmental Protection (PADEP) and the Region III United States Environmental Protection Agency (EPA Region III) signed an agreement entitled "One Cleanup Program Memorandum of Agreement (MOA or Pennsylvania One-Cleanup Program)," which clarifies how sites remediated under Pennsylvania's Act 2 program may satisfy Resource, Conservation and Recovery Act (RCRA) corrective action requirements through characterization and attainment of Act 2 remediation standards pursuant to Pennsylvania's Act 2. The proposed approach is to collaboratively develop a site wide approach program for the refinery utilizing the One Cleanup Program approach. The One Cleanup Program is a model program that would benefit the stakeholders by merging the remediation obligations under the various federal and state programs into one streamlined approach.

Sunoco submitted a Pennsylvania Act 2 Notice of Intent to Remediate (NIR) for the refinery to the PADEP on September 15, 2011. Submittal of the NIR formally entered the Pennsylvania portions of the refinery into the Pennsylvania Act 2 Program and acknowledged Sunoco's intent to enter the refinery into a One Cleanup Program. A copy of the NIR and the associated municipal and public notices is included in Appendix A of this report. The refinery was officially entered into the One Cleanup Program in November 2011; the One Cleanup Program acceptance letter is included in Appendix A of this Work Plan. The One Cleanup Program will serve as the regulatory program governing site wide remedial activities at the refinery, including those portions of the refinery situated in Pennsylvania and Delaware. One Cleanup Program activities undertaken in portions of the Facility situated in Pennsylvania will be performed under the regulatory lead of the PADEP. One Cleanup Program activities undertaken in portions of the Facility situated in Delaware will be performed under the regulatory lead of EPA Region III, in coordination with the Delaware Department of Natural Resources and Environmental Control (DNREC), as appropriate.

1.1 Site Description and Site History

The refinery is located on approximately 788 acres along the Delaware River in Marcus Hook, Pennsylvania. A minor portion of the southwest corner of the refinery is located in the state of Delaware (Figure 2). The refinery frontage extends approximately 4,800 feet along the northern banks of the Delaware River. The refinery is bordered by industrial, commercial and residential properties. The refinery is generally divided into two types of areas: refining/processing activities and crude oil/product storage. The refinery has a long history of petroleum transportation, storage, and processing. Operations at this site began in 1902 and the refinery has been owned/operated by Sunoco since its inception as Sun Oil in 1901.

On December 1, 2011, Sunoco announced that it is indefinitely idling the main processing units at its refinery in Marcus Hook, Pennsylvania due to deteriorating refining market conditions. The company expects to begin idling the Marcus Hook facility immediately while it continues to seek a buyer and also pursues options with third parties for alternate uses of the facility.

1.2 Objective and Technical Approach

This Work Plan summarizes the proposed technical and administrative approaches to characterize and remediate environmental conditions site wide. Work will be performed in accordance with this Work Plan to obtain: 1) releases of liability (ROL) under Act 2 from the PADEP, 2) comfort letters from EPA for all areas subject to RCRA corrective action at the refinery in support of a Final Agency Determination for the entire refinery, and 3) tank closure approval under the Delaware Tank Act. The details governing implementation of the site wide approach are described throughout the remainder of this Work Plan.

2.0 KEY ELEMENTS OF THE SITE WIDE APPROACH

The key elements of the site wide approach for the refinery are summarized below:

Designation of the Areas of Interest

As part of the site wide approach, Sunoco divided the refinery into Areas of Interest (AOIs) based on operational areas and risk-based factors, including: product types, potential exposure

pathways, receptors, known light non-aqueous phase liquid (LNAPL) quantities, and historical information. These AOIs are shown on Figure 2 and include:

- AOI 1 – 10 Plant;
- AOI 2 – 12 Plant;
- AOI 3 – Refinery Office Buildings;
- AOI 4 – Upper No.1 Tank Farm;
- AOI 5 – Lower No.1 Tank Farm/15 & 17 Plants;
- AOI 6 – Lube Oil Center; and
- AOI 7 – Ethylene Complex & Storm Water Tankage.

Dependent upon the results of the investigation activities, these AOIs may be further refined based on site conditions and receptors.

Definition of Site for Act 2 Purposes

For the purposes of requesting relief from liability under Pennsylvania Act 2, Sunoco may define a “Site” to include multiple AOIs, a single AOI, or a portion of an AOI. Appropriate Act 2 Reports will be prepared for each Site as discussed later in this Work Plan.

Site Use

Investigation and remedial activities interior to the boundaries of the refinery will be completed under a non-residential current and future land use scenario. Investigation and remediation of off-site areas will be completed under either a residential or non-residential land use scenario, as needed, given the surrounding land use.

Compounds of Concern

The proposed COC list for soils and groundwater are included in Table 1. Site characterization for the presence of additional COCs may be completed in specific AOIs based on historic uses and the results of the initial screening process or the requirements of the Delaware Tank Act.

Media of Concern

The media of concern for the refinery include groundwater, soil and soil gas.

Remediation Standards

The target remediation standards for soil and groundwater at the refinery are the Pennsylvania Act 2 remediation standards. Remediation standards may include statewide health, background, site-specific, or a combination of these standards. The Act 2 remediation standards are also target standards for the RCRA Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs). For soil gas within the refinery boundaries, the target remediation standards are the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs) for current site use and non-residential standards for future site use. Additional standards may be evaluated in relation to the Delaware Tank Act.

Soil

Soil samples will be collected from the 0-2 feet and 2-15 feet depth intervals at the refinery. Soil samples will be screened against the statewide health standards and the appropriate Act 2 medium-specific concentration (MSC) for soil. Site-specific remediation standards may be developed using either calculated risk-based standards or pathway elimination options. Background standards may also be utilized as appropriate.

Groundwater

Groundwater at the refinery exists in the unconsolidated materials that overly bedrock beneath the refinery. Compliance with the appropriate Act 2 groundwater standards will be achieved. Groundwater samples will be screened against the non-residential Act 2 groundwater MSCs (TDS<2,500 mg/l). Back-calculated, risk-based site-specific groundwater standards or pathway elimination may be utilized interior to the refinery to attain site-specific groundwater standards based on the fact that the highest and most beneficial use for groundwater is as recharge to surface water. Background standards may be utilized for groundwater, as appropriate.

Soil Gas

Soil gas samples may be collected to evaluate the potential vapor intrusion or migration pathways, both onsite and offsite. Where applicable, groundwater and soil samples will be evaluated in accordance with the applicable PADEP vapor intrusion guidance. When using the PADEP's vapor intrusion guidance, the EPA- Pennsylvania Defaults Permissible Exposure Limits (PELs) Volatilization to Indoor Air Screen and non-residential screening values will be applied when evaluating the potential indoor air pathway within the boundaries of the refinery. Potential off-site impacts associated with vapor transport will also be evaluated in accordance with the vapor intrusion guidance. In lieu of additional efforts under the statewide health

standard, site-specific risk analyses (i.e., using the Johnson and Ettinger Model and site-specific inputs) may be performed. In addition, vapor intrusion mitigation measures may be taken.

Surface Water

Potential impacts to surface water (i.e., the Delaware River) will be evaluated through characterization of the groundwater-to-surface water pathway, or by using groundwater to surface water mixing models.

Pennsylvania Tank Act

For each aboveground storage tank ("AST") regulated under the Pennsylvania Tank Act that is taken out of service or undergoes a change in service, Sunoco will undertake an assessment in accordance with the PADEP's Aboveground Storage Tank Closure Guidance issued October 12, 2002. In the event that such assessment confirms that there has been a release from the AST, Sunoco will perform the measures required by 25 Pa. Code Sections 245.304, 245.305, 245.306 and 245.307 of the Pennsylvania Corrective Action Process regulations. After performing these tasks, Sunoco will conduct an additional investigation consistent with this Site Wide Approach Work Plan. This additional investigation shall consider available information including subsurface conditions, risk, history, etc. and shall assess whether the release from the AST requires additional characterization, remediation, or other work. Thereafter, Sunoco will report the results of its investigation to the PADEP and include a proposal for no further action, additional characterization, and/or proposals for remedial action, including a schedule for conducting any proposed remediation.

Delaware Tank Act (The Jeffrey Davis Aboveground Storage Tank Act)

For each AST regulated under the Jeffrey Davis Aboveground Storage Tank Act that is taken out of service or undergoes a change in service, Sunoco will undertake an assessment in accordance with DNREC's Regulations Governing Aboveground Storage Tanks, issued June 11, 2004 and revised February 11, 2011. In the event that such assessment confirms that there has been a release from the AST, Sunoco will perform an investigation required by Part E. Section 1 of the Regulations Governing Aboveground Storage Tanks as part of the Corrective Action Process regulations in conjunction with the approach outlined in this Site Wide Approach Work Plan. This additional investigation shall consider available information including subsurface conditions, risk, history, etc. and shall assess whether the release from the AST requires additional characterization, remediation, or other work. Thereafter, Sunoco will report the results of its investigation to DNREC and EPA Region III and include a proposal for no

further action, additional characterization, and/or proposals for remedial action, including a schedule for conducting any proposed remediation.

3.0 PROCEDURAL STEPS

The following sections describe procedural and reporting steps that will be followed to implement the site wide approach for the refinery.

3.1 Current Conditions Report

Sunoco will prepare a Current Conditions Report and Comprehensive Remedial Plan (CCR) for the refinery. The CCR is the first report deliverable under this Work Plan. The CCR will present a detailed Site Conceptual Model based on available historic information and review of historic environmental reports. The Site Conceptual Model will rely on the use of graphic information and data management systems to provide the current understanding of subsurface conditions and the fate and transport of separate phase and dissolved phase contaminants in the subsurface. The CCR will include a discussion of SWMUs and AOCs listed in the RFA.

The CCR will include a description of the current conditions in each AOI and this information will be used to form the basis for proposed site characterization activities.

3.2 Pre-Site Characterization Meeting

Prior to commencing site characterization activities for each AOI, Sunoco and its consultant will meet with PADEP, DNREC and EPA, as needed, to review the proposed site characterization activities. The purpose of this meeting is to obtain PADEP's, DNREC's and EPA Region III's concurrence that the planned site characterization activities will adequately address agency concerns. The dates of these meetings will be referenced in the reports.

3.3 Site Characterization

Sunoco will characterize the environmental conditions at the refinery in accordance with routine Act 2 administrative and technical requirements under the One Clean Up Program.

3.4 Reporting

The reports prepared to document site characterization, risk assessment and cleanup activities will conform to the reporting nomenclature of the Pennsylvania Act 2 program. Activities completed in relation to Pennsylvania or Delaware's tank programs will be incorporated into these reports. A description of each type of report is provided in the following sections. Reports will be prepared for each AOI.

3.4.1 Remedial Investigation Reports

Following site characterization, a Remedial Investigation Report (RIR) will be prepared. In the portions of the refinery situated in Pennsylvania, the RIR will be prepared in accordance with the Act 2 Technical Guidance Manual (TGM).

3.4.2 Risk Assessment Report

If required, a risk assessment (RA) would be completed to determine if remediation is necessary. If a RA is required, a RA report will be prepared. The RA report may be combined with the RIR.

3.4.3 Cleanup Plan

Where remedial actions are required based on the results of the remedial investigation activities or RA, Sunoco will prepare a Cleanup Plan. The Cleanup Plan will be prepared in accordance with the Act 2 TGM.

3.4.4 Final Report

When the RIR, Risk Assessment Report, and Cleanup Plan are approved, Sunoco will prepare a Final Report. The Final Report will be prepared in accordance with the Act 2 TGM.

3.4.5 Post Remediation Care

Sunoco currently operates a number of remedial systems and routinely performs operation and maintenance (O&M) and performance monitoring activities for these systems. The O&M and performance monitoring data for these systems is documented in Groundwater Remediation and Gauging Status Reports that are prepared by Sunoco and submitted to PADEP, DNREC and EPA.

Where applicable, Post Remedial Care Plans will document the engineering and administrative controls consistent with the Final Reports for each Site. The Post Remedial Care Plans will also include those actions necessary to monitor the implementation of these controls. The implementation and status of post remediation care activities will be documented in the Groundwater Remediation, Operation & Maintenance and Monitoring Status Reports.

3.5 Environmental Covenant

To ensure that any required Post Remediation Care Plan will continue to be implemented after approval of any Final Reports, Sunoco will prepare and record an environmental covenant. In portions of the refinery situated in Pennsylvania, Sunoco will prepare an environmental covenant in accordance with Pennsylvania Act 68, the Uniform Environmental Covenant Act. In portions of the refinery situated in Delaware, Sunoco will prepare the appropriate deed restrictions as necessary.

3.6 EPA Procedures

3.6.1 Environmental Indicators

Currently, the refinery has achieved a “Yes” determination for both the Current Human Exposures Under Control (Human Health) and the Migration for Contaminated Groundwater Under Control (Groundwater) Environmental Indicators (EIs). The EIs are available on EPA Region III’s website at the following link: <http://www.epa.gov/reg3wcmd/ca/pa.htm>.

3.6.2 RCRA SWMUs and AOCs

The August 1991 Phase II Final RCRA Facility Assessment (RFA) identified 100 Solid Waste Management Units (SWMUs) and eight Areas of Concern (AOCs) at the refinery. Of the 100 SWMUs and eight AOCs, 13 SWMUs are identified as RCRA-regulated units. The SWMUs and AOCs are summarized in Table 2 of this Work Plan. The SWMUs and AOCs listed in the RFA will be discussed further in the CCR. One of the SWMUs (Middle Creek, surface impoundment) is closed and is in post closure care which will be documented in the CCR. It is anticipated that the majority of the SWMUs and AOCs will be administratively

closed based on completed actions rather than requiring additional characterization or remediation.

For the SWMUs and AOCs that require additional characterization, the proposed investigation activities will be discussed with EPA during the pre-site characterization meeting discussed in Section 3.2 of this Work Plan. After characterizing and/or remediating SWMUs and AOCs, Sunoco will seek a "comfort letter" from EPA expressing EPA's agreement that characterization is complete and no further corrective action is required.

3.6.3 Statement of Basis

Upon EPA's acceptance of the PADEP Releases of Liability and DNREC's tank closure approvals, the EPA will review the site information to prepare the Statement of Basis and notify Sunoco if there are any outstanding issues that must be addressed to meet EPA's requirements. Once the EPA is satisfied, EPA will prepare a Statement of Basis for the refinery. The Statement of Basis will include:

- A description and environmental setting of the refinery;
- A description of the regulatory reports that were prepared to document the site characterization and cleanup of the SWMUs and AOCs at the refinery;
- Names and concentrations of contaminants detected at the refinery and associated exposure pathways;
- A description of the selected remedial measures for containing or cleaning up the waste management units at the refinery; and
- Public involvement requirements under the corrective action program.

3.6.4 EPA Final Determination

Following completion of the public notice provisions, EPA will issue a Final Agency Determination documenting that all RCRA Corrective Action obligations have been addressed at the refinery.

3.7 Public Involvement

The Public Involvement Plan for the refinery is provided in Appendix B. EPA will complete its own public involvement through notices under the Corrective Action Program and by updating its online Fact Sheet for the refinery.

4.0 IMPLEMENTATION SCHEDULE

The proposed implementation schedule for characterizing and developing Cleanup Plans for each AOI is provided in Appendix C. Sunoco anticipates preparing Final Reports for each AOI after completing all remedial activities included in the approved Cleanup Plan.

5.0 REFERENCES

The following reports were referenced in this report.

A.T. Kearney, Inc. Phase II Final RCRA Facility Assessment for the Sun Refining and Marketing Company Marcus Hook Refinery, Marcus Hook, Pennsylvania; August 19, 1991.

TABLES

Table 1
Constituents of Concern for Groundwater
Site Wide Approach Work Plan
Sunoco Marcus Hook Refinery
Marcus Hook, Pennsylvania

METALS	CAS No.
Lead (dissolved)	7439-92-1

VOLATILE ORGANIC COMPOUNDS	CAS No.
1,2-Dichloroethane	107-06-2
1,2,4-Trimethylbenzene	95-63-6
1,3,5-Trimethylbenzene	108-67-8
Benzene	71-43-2
Cumene	98-82-8
Ethylbenzene	100-41-4
Ethylene dibromide	106-93-4
Methyl tertiary butyl ether	1634-04-4
Toluene	108-88-3
Xylenes (total)	1330-20-7

SEMI-VOLATILE ORGANIC COMPOUNDS	CAS No.
Chrysene	218-01-9
Fluorene	86-73-7
Naphthalene	91-20-3
Phenanthrene	85-01-8
Pyrene	129-00-0

Notes:

1. Constituents are from Pennsylvania Corrective Action Process (CAP) Regulation Amendments effective December 1, 2001; provided in Chapter VI, Section E (pgs. 29-30) of PADEP Document, *Closure Requirements for Underground Storage Tank Systems*, effective April 1, 1998 and the March 18, 2008 revised PADEP Petroleum Short List.

Table 1 (continued)
Constituents of Concern for Soil
Sunoco Marcus Hook Refinery
Marcus Hook, Pennsylvania

METALS	CAS No.
Lead (total)	7439-92-1

VOLATILE ORGANIC COMPOUNDS	CAS No.
1,2-Dichloroethane	107-06-2
1,2,4-Trimethylbenzene	95-63-6
1,3,5-Trimethylbenzene	108-67-8
Benzene	71-43-2
Cumene	98-82-8
Ethylbenzene	100-41-4
Ethylene dibromide	106-93-4
Methyl tertiary butyl ether	1634-04-4
Toluene	108-88-3
Xylenes (total)	1330-20-7

SEMI-VOLATILE ORGANIC COMPOUNDS	CAS No.
Anthracene	120-12-7
Benzo(a)anthracene	56-55-3
Benzo (g,h,i) perylene	191-24-2
Benzo(a)pyrene	50-32-8
Benzo(b)fluoranthene	205-99-2
Chrysene	218-01-9
Fluorene	86-73-7
Naphthalene	91-20-3
Phenanthrene	85-01-8
Pyrene	129-00-0

Notes:

1. Constituents are from Pennsylvania Corrective Action Process (CAP) Regulation Amendments effective December 1, 2001; provided in Chapter VI, Section E (pgs. 29-30) of PADEP Document, *Closure Requirements for Underground Storage Tank Systems*, effective April 1, 1998 and the March 18, 2008 revised PADEP Petroleum Short List.

Table 2
SWMUs and AOCs
Site Wide Approach Work Plan
Sunoco Marcus Hook Refinery
Marcus Hook, PA

SWMU ID	SWMU Name	AOI
SWMU NO. 1	Tank No. 1 Receiving Tank (Solid Waste Facility)*	5
SWMU NO. 2	Tank No. 2 Receiving Tank (SWF)*	5
SWMU NO. 3	Tank No. 3 Receiving Tank (SWF)*	5
SWMU NO. 4	Tank No. 4 Sludge Storage Tank (SWF)*	5
SWMU NO. 5	Tank No. 5 Sludge Decant Tank (SWF)*	5
SWMU NO. 6	Tank No. 6 Collection and Transfer Tank (SWF)*	5
SWMU NO. 7	Tank No. 51 Mix Tank (SWF)*	5
SWMU NO. 8	Tank No. 52 Contact Tank (SWF)*	5
SWMU NO. 9	Tank No. 53a Surge Tank (SWF)*	5
SWMU NO. 10	Tank No. 53b Surge Tank (SWF)*	5
SWMU NO. 11	Tank No. 53c. Surge Tank (SWF)*	5
SWMU NO. 12	Tank No. 56 Filtrate Tank (SWF)*	5
SWMU NO. 13	Tank No. 50 Lime Slurry Tank (SWF)	5
SWMU NO. 14	Tank No. 54 Precoat Tank (SWF)	5
SWMU NO. 15	Tank No. 55 H.W. Wash Tank (SWF)	5
SWMU NO. 16	Tank No. 57 Equalizing Tank (SWF)	5
SWMU NO. 17	Catalyst Fines Silo	5
SWMU NO. 18	Lime, Spent Clay, and Catalyst Loading System	5
SWMU NO. 19	Sludge Receiving Trough (SWF)	5
SWMU NO. 20	Sludge Filter Press (SWF)	5
SWMU NO. 21	Filter Cake Knock-Out Area	5
SWMU NO. 22	Hazardous Waste Container Storage Pad*	5
SWMU NO. 23	Old Sludge Basin	5
SWMU NO. 24	Old Decant Basin	5
SWMU NO. 25	Old 12 Plant Sludge Basin	5
SWMU NO. 26	Old 18 Plant Sludge Basin	6
SWMU NO. 27	Phillips Island Area	7
SWMU NO. 28	Phillips Island Maintenance Storage Area	7
SWMU NO. 29	Phillips Island Roll-Off Storage Area	7
SWMU NO. 30	Phillips Island Old Drum Storage/Small Roll-Off Area	7
SWMU NO. 31	Fire Fighter Training Area	7
SWMU NO. 32	Imoundment Tank No. T-101	7
SWMU NO. 33	Phillips Island Surface Drainage Ditches	7
SWMU NO. 34	Phillips Island Sand Blasting Area	7
SWMU NO. 35-39	10-4 Plant Catalyst Fines Collection Roll-Offs	1
SWMU NO. 40	10-4 Plant Roll-Off Storage Area	1
SWMU NO. 41	10-4 Plant Spent Catalyst Silo	1
SWMU NO. 42	10-4 Plant Electrostatic Precipitators	1

Table 2
SWMUs and AOCs
Site Wide Approach Work Plan
Sunoco Marcus Hook Refinery
Marcus Hook, PA

SWMU NO. 43	10-4 Plant Sour Water Stripper	1
SWMU NO. 44	Plant Catalyst Regeneration Unit	1
SWMU NO. 45	Garage High Pressure Wash Area	5
SWMU NO. 46	Garage Aboveground Waste Oil Tank	5
SWMU NO. 47	Mechanical Shop Saw Dust Collector	5
SWMU NO. 48	Mechanical Shop Sand Blast Unit	5
SWMU NO. 49	Mechanical Shop Wire Spray Unit	5
SWMU NO. 50	Mechanical Shop Equipment Wash Rack	5
SWMU NO. 51	Dock No. 2 Recovery Well System	6
SWMU NO. 52	Laboratory Waste Accumulation Building	3
SWMU NO. 53	8-C Crude Unit Drip Showers	3
SWMU NO. 54	B & P Warehouse Drum Loading Area	6
SWMU NO. 55	Benzene Vapor Recovery System	5
SWMU NO. 56	Asphalt Plant Area	5
SWMU NO. 57	Clay Contact Plant Area	3
SWMU NO. 58	Slop Oil Tank V-29	3
SWMU NO. 59	Slop Oil Tank 132	3
SWMU NO. 60	Slop Oil Tank 388	5
SWMU NO. 61	Ballast Water Tank W-12	3
SWMU NO. 62	Heat Exchanger Bundle Cleaning Area	5
SWMU NO. 63	1A Oil/Water Separator	4
SWMU NO. 64	1B Oil/Water Separator	Sitewide
SWMU NO. 65	1C Oil/Water Separator	5
SWMU NO. 66	1D Oil/Water Separator	5
SWMU NO. 67	1E Oil Water Separator	Sitewide
SWMU NO. 68	1F Oil/Water Separator	5
SWMU NO. 69	1F Oil/Water Separator Feed Trench	5
SWMU NO. 70 -79	9 and 14 Oil/Water Separators	6
SWMU NO. 80.	Discharge Pipe and Excavation at 9 and 14 Oil/Water Separators	6
SWMU NO. 81,82	10 Oil/Water Separators	4
SWMU NO. 83	12A Oil/Water Separators	5
SWMU NO. 84-86	16 Oil/Water Separators	6
SWMU NO. 87-94	15 Oil/Water Separators	5
SWMU NO. 95	Combined Process/Storm Sewer System	Sitewide
SWMU NO. 96	Middle Creek Surface Drainage System	4,5,7
SWMU NO. 97	Product Drip Collection Areas	Sitewide
SWMU NO. 98	Aboveground Tank Containment Areas	Sitewide
SWMU NO. 99	Rail Car Loading/Unloading Areas and Associated Tracks	Sitewide
SWMU NO. 100	Used Oil Accumulation Areas	Sitewide

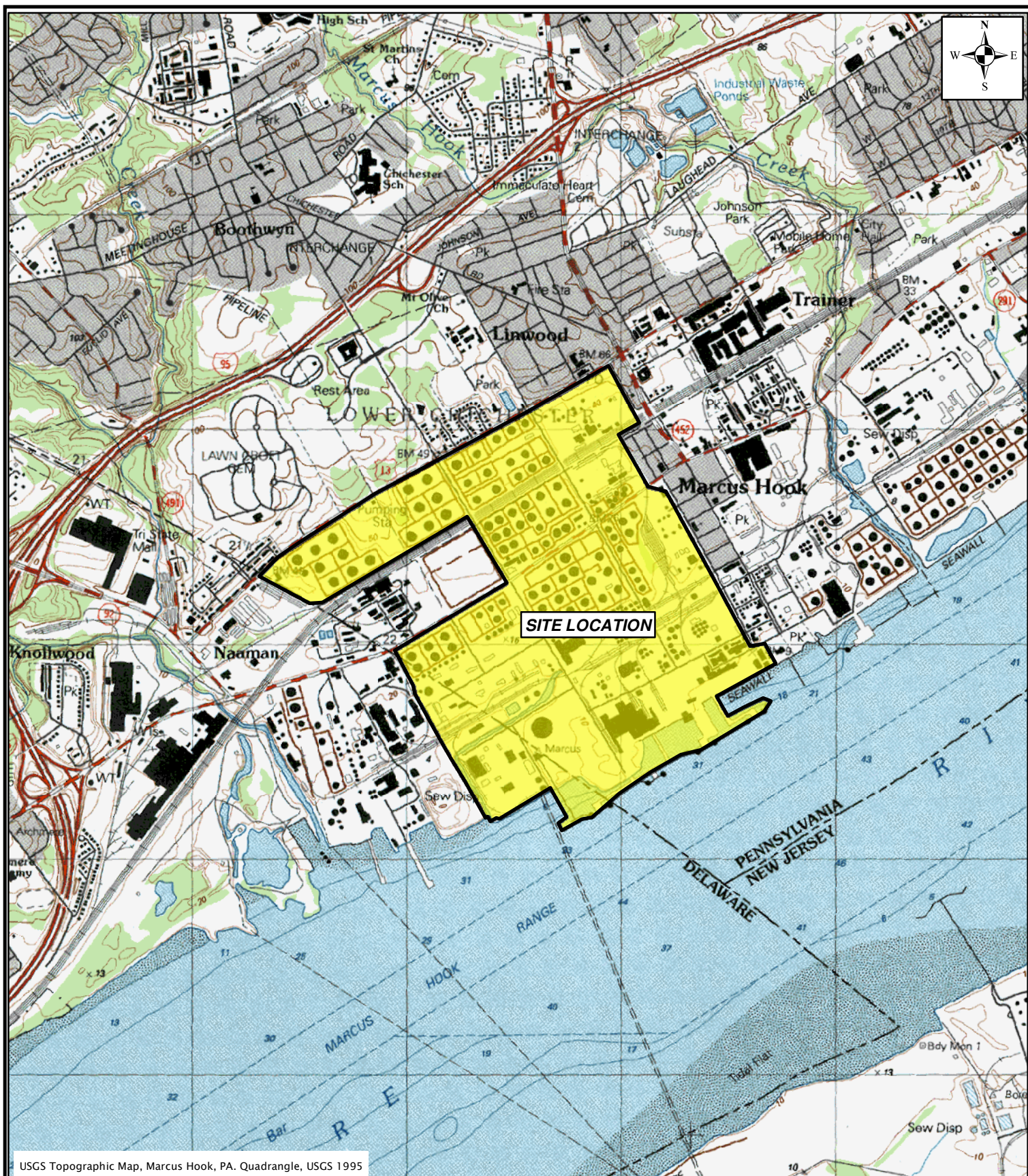
Table 2
SWMUs and AOCs
Site Wide Approach Work Plan
Sunoco Marcus Hook Refinery
Marcus Hook, PA

AOC ID	AOC Name	AOI
AOC A	Stained Refinery Areas	Sitewide
AOC B	Underground Transfer Lines	Sitewide
AOC C	Underground Storage Tank Excavation Areas	Sitewide
AOC D	Underground Storage Tanks	5,6
AOC E	Underground Storage Caverns	4,5
AOC F	8-C Plant PCB Transformer Area	3
AOC G	1F Oil/Water Separator Electrical Box	5
AOC H	Kerosene Contamination Area	6

Notes:

- 1. SWMU = Solid Waste Management Unit**
- 2. AOC = Area of Concern**
- 3. "*" = RCRA-Regulated Unit**
- 4. Source of List = *Phase II Final RCRA Facility Assessment, of the Sun Refining and Marketing Company Marcus Hook Refinery, Marcus Hook, PA* , prepared by A.T. Kearney, Inc., dated August 19, 1991**

FIGURES



Sunoco, Inc. (R&M) Marcus Hook Refinery Marcus Hook, PA

Figure 1: Site Location Map
 Site Wide Approach Work Plan
 Sunoco Marcus Hook Refinery

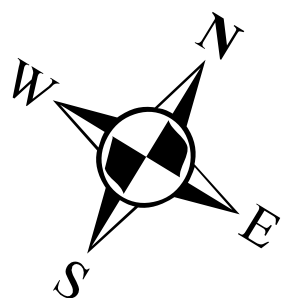
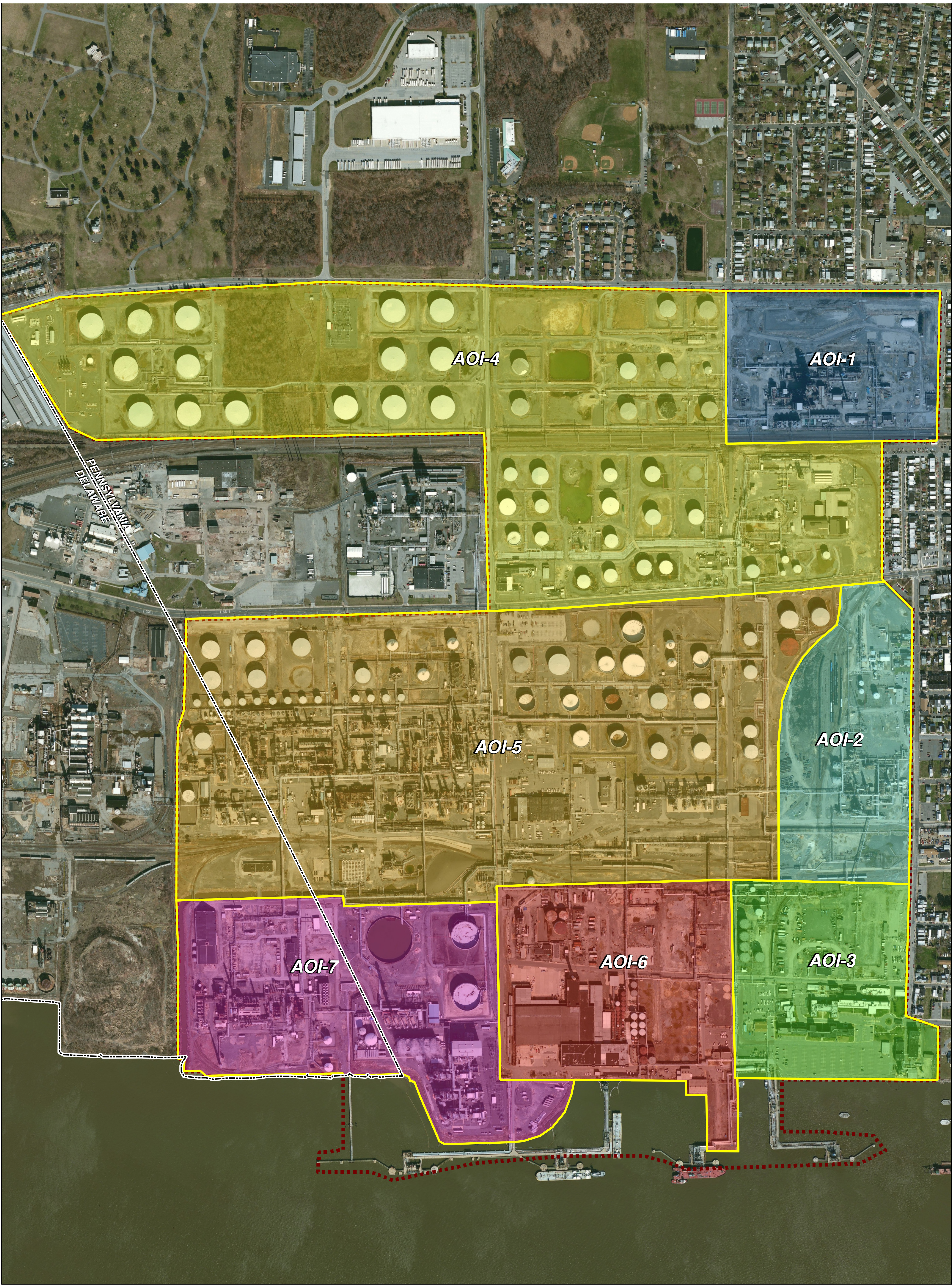
Marcus Hook

Pennsylvania

Job Number
 220027801

Scale: 1" = 2000'
 0 1,000 2,000
 Feet

Date
 October 1, 2011



Areas of Interest

- AOI-1 - 10 Plant
- AOI-2 - 12 Plant
- AOI-3 - Refinery Office Buildings
- AOI-4 - Upper No. 1 Tank Farm

Legend

- AOI-5 - Lower No. 1 Tank Farm/15 & 17 Plants
- AOI-6 - Lube Oil Center
- AOI-7 - Ethylene Complex & Phillips Island
- Approximate Property Boundary
- Delaware State Line

NOTES:
1. Bing Maps aerial imagery provided by © 2010 Microsoft Corporation and its data suppliers and obtained under the licensing agreement with ESRI.

Figure 2: Areas of Interest
Site Wide Approach Work Plan
Sunoco Marcus Hook Refinery
Marcus Hook, Pennsylvania



Sunoco, Inc.
Marcus Hook Refinery
Marcus Hook, PA.

0 140 280 560 Feet

SCALE: 1" = 280'
DATE: August 1, 2011
DWN BY: MM
CKD BY: DW
JOB#: 220027801

Appendix A

Notice of Intent to Remediate and
Associated Notices

NIR AND ASSOCIATED NOTICES



Sunoco, Inc.
10 Industrial Highway MS4
Lester, PA 19029

September 15, 2011

Mr. Walter Payne
Pennsylvania DEP
SE Regional Office
2 East Main Street
Norristown, PA 19401

Re: Notice of Intent to Remediate for Sunoco Inc. (R&M)
Marcus Hook Refinery
Marcus Hook, Delaware County

Dear Mr. Payne:

In accordance with the Land Recycling and Environmental Remediation Standards Act (Act 2), enclosed are two copies of a Notice of Intent to Remediate (NIR) for the Sunoco Inc. (R&M) Marcus Hook Refinery (facility). Sunoco is submitting this NIR to formally enter the facility into the PA Act 2 Program and the PA One Cleanup Program. DEP and EPA have agreed the facility can be entered into the PA One Cleanup Program and the facility will be listed on EPA's online PA One Cleanup Program list. Sunoco is currently preparing a *Work Plan for Site Wide Approach under the One Cleanup Program* (Site Wide Approach Work Plan) that is intended to be submitted to DEP and EPA in the near future. This document is intended to serve as the road map to guide the remedial program and associated regulatory framework for the facility. Sunoco is also preparing a *Current Conditions Report and Comprehensive Remedial Plan* (CCR), which is identified as the first report submittal under the Site Wide Approach Work Plan.

The public notices for this NIR were sent out on 9/15/11, and we are awaiting the certified receipts and proof of publications. Once these documents are received, we will send them to you under separate cover.

Please call me at (610) 833-3444 or email me at jroppenheim@sunocoinc.com with any questions or comments.

Best Regards,

A handwritten signature in black ink, appearing to read "JA Oppenheim". The signature is stylized with a large, sweeping "J" and "O".

James Oppenheim, PE
Remediation Project Manager

cc: Sunoco Legal Dept.
Marcus Hook Refinery Environmental Central File
David Burke, PADEP
Colleen Costello, Langan Engineering & Environmental
Paul Gotthold, EPA Region III
Hon Lee, EPA Region III



NOTICE OF INTENT TO REMEDIATE

Act 1995-2 requires four general information items to be included in the NIR: the general location, listing of contaminants, intended use of property, and proposed remediation measures. In addition, indicate the standard(s) to be obtained (if known) and attach a scaled site map (if available).

Property Name Sunoco Inc. (R&M) Marcus Hook Refinery

Former Name(s) / AKA _____

Address / Location 100 Green Street

City Marcus Hook, PA Zip Code 19061

Municipality(s) Borough of Marcus Hook County(ies) Delaware

Latitude 39 ° (deg). 48 ' (min) 49.38 " (sec) Longitude -75 ° (deg). 25 ' (min) 27.28 " (sec)

Horizontal Collection Method Block Centroid

Horizontal Reference Datum NAD 1983 Reference Point ENTGN (Plant Entrance)

Lat: 39° 48' 43.3141" Long: -75° 24' 49.0411"

☒ Wish to participate in the DEP/EPA MOA. Contact Troy Conrad at tconrad@state.pa.us for details.

EPA ID#, if known _____

DEP ID#(s), if known _____

(i.e., eFACTS site ID#, storage tank facility ID#, water quality permit #, watershed permit, air quality permit #, etc.)

Date Release Occurred (if known) _____

Provide a brief description of the site contamination in plain language (e.g. fuel oil spill, historical chemical industrial area contamination), the names of any know primary contaminants to be addressed, and the intended future use of the property.

The site contamination consists of historic refining operation impacts of petrochemical industrial area constituents in both soil and groundwater. The primarily constituents of concern are lead, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,2-dichloroethane, benzene, cumene, ethylbenzene, ethylene dibromide, MTBE, toluene, xylenes, chrysene, fluorene, naphthalene, phenanthrene, and pyrene in groundwater and soil, and additionally anthracene, benzo(a)anthracene, benzo(g,h,i)perylene, benzo(a)pyrene, benzo(b)fluoranthene in soil. The future use of the facility is to remain industrial.

Provide a general description of proposed remediation measures.

Sunoco is submitting this Notice of Intent to Remediate (NIR) to formally enter the Sunoco Marcus Hook Refinery (facility) into the PA Act 2 Program. Sunoco also intends to enter the facility into the PA One Cleanup Program. DEP and EPA have agreed that the facility can be entered into the PA One Cleanup Program and the facility will be listed on EPA's online PA One Cleanup Program list. A Work Plan for Site Wide Approach under the One Cleanup Program (Site Wide Approach Work Plan) is being prepared by Sunoco in support of the site wide remedial program at the facility. A Current Conditions Report (CCR) is also being prepared by Sunoco and will be submitted to PADEP and EPA in December 2011. This CCR will divide the facility into 7 Areas of Interest (AOIs). The AOIs are shown in

the attached Figure 1. For the purposes of this NIR, the seven AOIs will consist of the 10 Plant Tankage area, 12 Plant, Refinery Laboratory, Upper No. 1 Tank Farm, Lower No. 1 Tank Farm, Lube Oil Field, and Ethylene Complex. Each AOI will be characterized in accordance with PA Act 2. Remedial measures will be developed to address the risk of exposure identified in each of the AOIs based on the site characterization activities.

Remediation Standard(s) planned (if known at this time):

<input checked="" type="checkbox"/> Unknown at this time	<input checked="" type="checkbox"/> Soil	<input checked="" type="checkbox"/> Groundwater
<input type="checkbox"/> Background Contaminants:	<input type="checkbox"/> Soil	<input type="checkbox"/> Groundwater
<input type="checkbox"/> Statewide Health - Residential Contaminants:	<input type="checkbox"/> Soil	<input type="checkbox"/> Groundwater
<input type="checkbox"/> Statewide Health - Non-Residential Contaminants:	<input type="checkbox"/> Soil	<input type="checkbox"/> Groundwater
<input type="checkbox"/> Site Specific Contaminants:	<input type="checkbox"/> Soil	<input type="checkbox"/> Groundwater
<input type="checkbox"/> Special Industrial Area* Contaminants:	<input type="checkbox"/> Soil	<input type="checkbox"/> Groundwater

*NOTE: Specific standard or Special Industrial Area require a 30-day municipal comment period

Remediator / Property Owner / Consultant. Complete the form below for each recipient obtaining a release of liability upon approval of the final report. Attach additional sheets as necessary.**Remediator**

Contact Person/Title James Oppenheim eFACTS Client ID* _____
 Relationship to Site Remediation Project Manager Client Type* _____
 (e.g. owner, remediator, participant in cleanup, consultant, etc.)
 Phone Number (610) 833-3444 Email Address jroppenheim@sunocoinc.com
 Company Name Sunoco, Inc. (R&M) EIN or Federal ID # _____
 Address (street, city, state, zip) 10 Industrial Hwy MS4, Lester, PA 19029

Property Owner

Contact Person/Title Carol Ziegler eFACTS Client ID* _____
 Relationship to Site Public Relations Manager Client Type* _____
 (e.g. owner, remediator, participant in cleanup, consultant, etc.)
 Phone Number (610) 859-1071 Email Address casloan@sunocoinc.com
 Company Name Sunoco, Inc. (R&M) EIN or Federal ID # _____
 Address (street, city, state, zip) 100 Green Street, Marcus Hook, PA 19061

Consultant

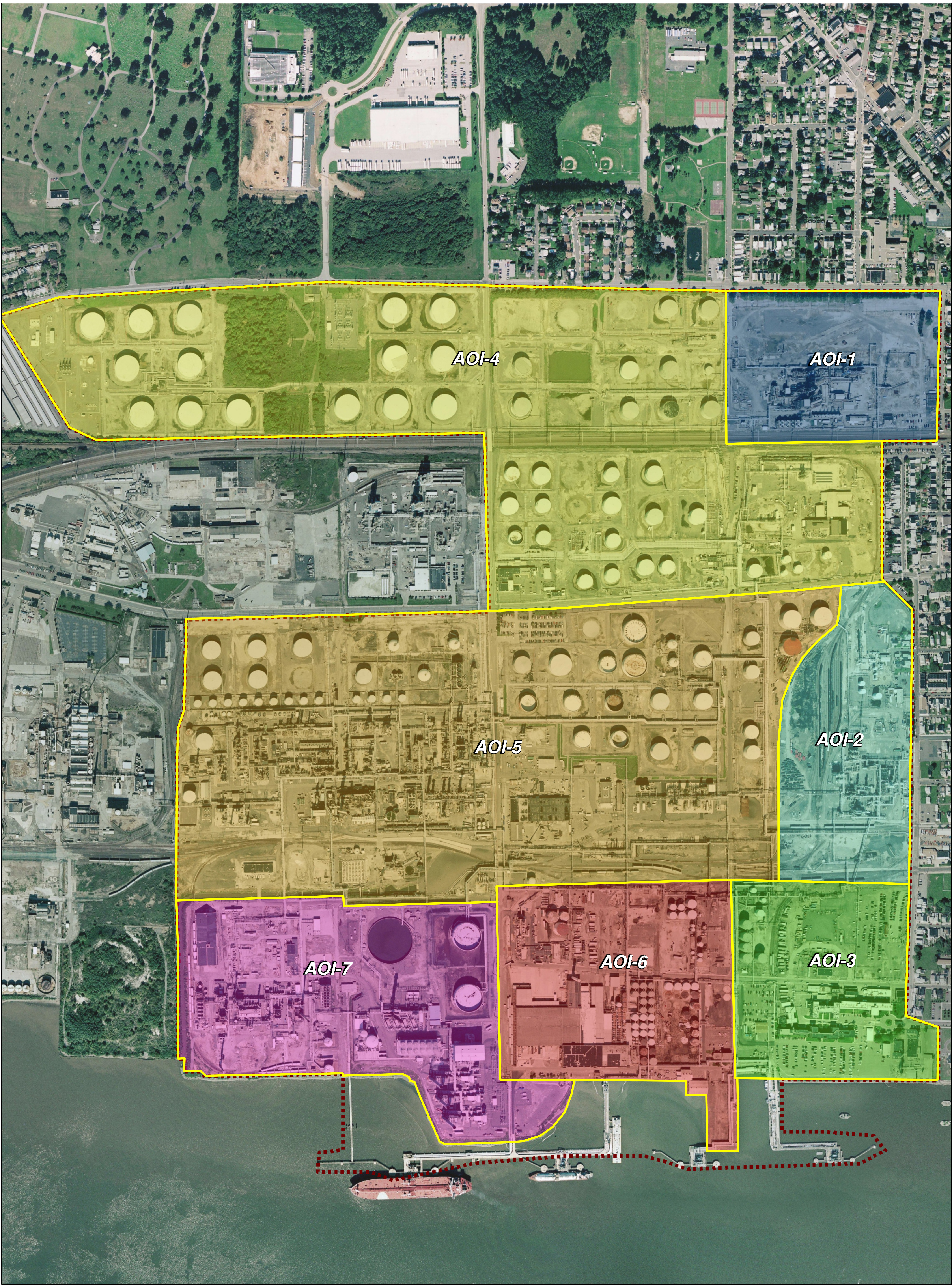
Contact Person/Title Colleen Costello, P.G./Senior Principal eFACTS Client ID* _____
 Relationship to Site Consultant Client Type* _____
 (e.g. owner, remediator, participant in cleanup, consultant, etc.)
 Phone Number (215) 491-6500 Email Address ccostello@langan.com
 Company Name Langan Engineering and Environmental Services EIN or Federal ID # _____
 Address (street, city, state, zip) 2700 Kelly Road, Suite 200, Warrington, PA 18976

*Include eFACTS Client ID (if known) – "Client Types" below:

Association/Organization	Limited Liability company	Partnership-General
Authority	Limited Liability Partnership	Partnership-Limited
County	Municipality	School District
Estate/Trust	Non-Pennsylvania Government	Sole Proprietorship
Federal Agency	Other (Non-Government)	State Agency
Individual	Pennsylvania Corporation	

Preparer of Notice of Intent to Remediate

Name James Oppenheim Title Remediation Project Manager
 Phone Number (610) 833-3444 Email Address jroppenheim@sunocoinc.com
 Company Name Sunoco, Inc. (R&M) eFACTS Client ID _____
 Address (street, city, state, zip) 10 Industrial Hwy MS4, Lester, PA 19029



Legend

- Areas of Interest**

AOI-1	AOI-5
AOI-2	AOI-6
AOI-3	AOI-7
AOI-4	
- Approximate Property Boundary

NOTES:
1. Bing Maps aerial imagery provided by © 2010 Microsoft Corporation and its data suppliers and obtained under the licensing agreement with ESRI.

Figure 1: Areas of Interest
Sunoco Marcus Hook Refinery
Marcus Hook, Pennsylvania



Sunoco, Inc.
Marcus Hook Refinery
Philadelphia, PA.

0 140 280 560 Feet

SCALE: 1" = 280'
DATE: August 1, 2011
DWN BY: MM
CKD BY: DW
JOB# 220027801



Professional Services Group

Sunoco, Inc.

10 Industrial Highway MS4
Lester, PA 19029
610 833 3400

September 15, 2011

Mr. Scott Swichar
Borough Manager
Borough of Marcus Hook
10th & Green Streets
Marcus Hook, PA 19061

Re: Sunoco, Inc. (R&M)
Marcus Hook Refinery
Marcus Hook, Delaware County, PA

Dear Sir/Madam:

The Land Recycling and Environmental Remediation Standards Act (Act 2) requires that a Notice of Intent to Remediate (NIR) be provided to the municipality in which the site is located when a site is being remediated under site-specific and/or statewide health cleanup standards. The municipality is afforded a 30-day comment period. In accordance with this provision of Act 2, Sunoco, Inc. (R&M) is formally notifying you of its intent to remediate the subject site under Act 2. A copy of the NIR, which will be sent to the Pennsylvania Department of Environmental Protection (PADEP), is enclosed. This notice will also be published in the Pennsylvania Bulletin, and a summary of the notice will appear in the Delaware County Daily Times.

Publication of this notice in the Delaware County Daily Times initiates the 30-day public and municipal comment period. During the next thirty days, your municipality may request to become involved in the development of the remediation plans for the site. If the municipality wishes to become involved in this project, please send your comments to Sunoco to my attention.

Please call me at (610) 833-3444 if you have any questions concerning the proposed remediation.

Best Regards,

A handwritten signature in black ink, appearing to read "J. Oppenheim". The signature is fluid and stylized, with a large, sweeping "J" and "O".

James R. Oppenheim, P.E.
Sr. Environmental Consultant

Cc: Sunoco Inc. (R&M) Legal Dept.
Sunoco Inc. (R&M) Public Relations Dept.
Sunoco Marcus Hook Project File
Colleen Costello, Langan

SENDER: COMPLETE THIS SECTION

- Complete Items 1, 2, and 3. Also complete Item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Walter Payne
Pennsylvania DEP
SE Regional Office
2 East Main Street
Norristown, PA 19401

2. Article Number

(Transfer from service label)

7011 1150 0001 9432 0584

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

Glenda Elzy ☐ Agent
☒ Addressee

B. Received by (Printed Name)

Glenda Elzy 9-15-11 C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage \$.64
Certified Fee 2.85
Return Receipt Fee (Endorsement Required) 2.30
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees \$ 5.79

Sent To Mr. Scott Swichar
Borough Manager
Borough of Marcus Hook
Municipal Building
10th and Green Streets
City, State, ZIP+4 Marcus Hook, PA 19061

PS Form 3800, August 2006

See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage \$ 1.48
Certified Fee 2.85
Return Receipt Fee (Endorsement Required) 2.30
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees \$ 6.63

Sent To Mr. Walter Payne
Pennsylvania DEP
SE Regional Office
2 East Main Street
City, State, ZIP+4 Norristown, PA 19401

PS Form 3800, August 2006

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Scott Swichar
Borough Manager
Borough of Marcus Hook
Municipal Building
10th and Green Streets
Marcus Hook, PA 19061

2. Article Number

(Transfer from service label)

7009 2820 0003 5137 6014

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

A. McHollan ☐ Agent
☒ Addressee

B. Received by (Printed Name)

A. McHollan C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

**Newspaper Notice of Intent
to Remediate to an Environmental Standard.
(Sections 302(e)(1)(ii), 303(h)(1)(ii),
304(n)(1)(i), and 305(c)(1))**

Pursuant to the Land Recycling and Environmental Remediation Standards Act, the act of May 19, 1995, P.L. 4, No. 1995-2, notice is hereby given that Sunoco Inc. (R&M) has submitted to the Pennsylvania Department of Environmental Protection (PADEP) a Notice of Intent to Remediate (NIR) a site located at 100 Green Street, Marcus Hook, Pennsylvania. This NIR states that the site is a petroleum refinery and has been found to be contaminated with petroleum compounds which have contaminated soil and groundwater on site. Sunoco Inc. (R&M) (Sunoco) has indicated that the proposed remediation measures will be source reduction and engineered boundary controls. The proposed future use of the property will be non-residential.

Sunoco plans to use the site-specific and/or statewide health cleanup standards at the site. The Act provides for a 30-day public comment period for site-specific standard remediation. The 30-day comment period is initiated with the publication of this notice. Until October 22, 2011, the Borough of Marcus Hook may submit a request to Sunoco to be involved in the development of the remediation and reuse plans for the site. The Borough of Marcus Hook may also submit a request to Sunoco during this 30-day comment period to develop and implement a public involvement plan. Copies of these requests and comments should be submitted to the PADEP at 2 East Main Street, Norristown, PA 19401 to attention of Mr. Walter Payne. All correspondence with Sunoco should be addressed to Carol Ziegler, Public Relations Manager, Sunoco Inc. (R&M) at 100 Green Street, Marcus Hook, PA 19061.

Proof of Publication of Notice in Delaware County Daily Times

Under Newspaper Advertising Act No. 587, Approved May 16, 1929

State of Pennsylvania, }
 County of Delaware, } ss.

Maureen A. Hartney

designated agent of CENTRAL STATES PUBLISHING,

INC., being duly sworn, deposes and says that the DELAWARE COUNTY DAILY TIMES, a daily newspaper of general circulation as defined in the above-mentioned Act, published at Primos, Delaware County, Pennsylvania, was established September 7, 1876, and issued and published continuously thereafter for a period of 100 years and for a period of more than six months immediately prior hereto, (under the name Chester Times prior to November 2, 1959) in the City of Chester, County of Delaware and further says that the printed notice or publication attached hereto is an exact copy of a notice or publication printed and published in the regular edition and issues of the DELAWARE COUNTY DAILY TIMES on the following dates, viz:

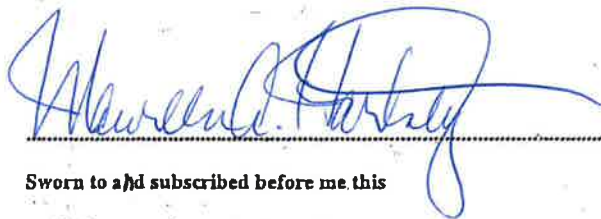
September 22,

2011

A.D. 20.....

and that said advertising was inserted in all respects as ordered.

Affiant further deposes that he is the proper person duly authorized by CENTRAL STATES PUBLISHING, INC. publisher of said DELAWARE COUNTY DAILY TIMES, a newspaper of general circulation, to verify the foregoing statement under oath and that affiant is not interested in the subject matter of the aforesaid notice or advertisement, and that all allegations in the foregoing statements as to time, place and character of publication are true.

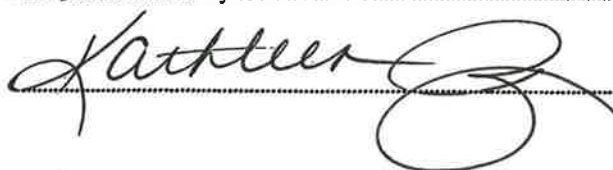


Sworn to and subscribed before me this

22nd September

2011

day of 20



Notary Public

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal

Kathleen Ragni, Notary Public

Upper Darby Twp., Delaware County

My Commission Expires March 2, 2015

MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

**Newspaper Notice of Intent
 to Remediate to an Environmental Standard.
 (Sections 302(e)(1)(ii), 303(h)(1)(ii),
 304(n)(1)(i), and 305(c)(1))**

Pursuant to the Land Recycling and Environmental Remediation Standards Act, the act of May 19, 1995, P.L. 4, No. 1995-2, notice is hereby given that Sunoco Inc. (R&M) has submitted to the Pennsylvania Department of Environmental Protection (PADEP) a Notice of Intent to Remediate (NIR) a site located at 100 Green Street, Marcus Hook, Pennsylvania. This NIR states that the site is a petroleum refinery and has been found to be contaminated with petroleum compounds which have contaminated soil and groundwater on site. Sunoco Inc. (R&M) (Sunoco) has indicated that the proposed remediation measures will be source reduction and engineered boundary controls. The proposed future use of the property will be non-residential.

Sunoco plans to use the site-specific and/or statewide health cleanup standards at the site. The Act provides for a 30-day public comment period for site-specific standard remediation. The 30-day comment period is initiated with the publication of this notice. Until October 22, 2011, the Borough of Marcus Hook may submit a request to Sunoco to be involved in the development of the remediation and reuse plans for the site. The Borough of Marcus Hook may also submit a request to Sunoco during this 30-day comment period to develop and implement a public involvement plan. Copies of these requests and comments should be submitted to the PADEP at 2 East Main Street, Norristown, PA 19401 to attention of Mr. Walter Payne. All correspondence with Sunoco should be addressed to Carol Ziegler, Public Relations Manager, Sunoco Inc. (R&M) at 100 Green Street, Marcus Hook, PA 19061.

ONE CLEANUP PROGRAM ACCEPTANCE LETTER



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, PA 19103-2029

RECEIVED
NOV 08 2011



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
LAND RECYCLING PROGRAM
400 Market Street
Harrisburg, PA 17105-8471

RECEIVED
NOV 08

Mr. James Oppenheim
Sunoco, Inc. (R&M)
10 Industrial Hwy MS4
Lester, PA 19029

Dear Mr. Oppenheim:

The United States Environmental Protection Agency (EPA) and the Pennsylvania Department of Environmental Protection (DEP) acknowledge your interest in completing the environmental cleanup at the Sunoco Inc. (R&M) Marcus Hook Refinery facility located at 100 Green Street, Marcus Hook, PA 19061 as identified by your Notice of Intent to Remediate (NIR) submitted September 15, 2011. DEP and EPA have developed an approach to conducting such work at RCRA facilities which we refer to as the One Cleanup Program.

EPA and DEP signed a *One Cleanup Program Memorandum of Agreement* (MOA) on April 21, 2004. The MOA provides a streamlined approach for Pennsylvania facilities with corrective action obligations under the Resource Conservation and Recovery Act (RCRA) to complete federal corrective action and, concurrently, receive a liability release from Pennsylvania. The EPA agrees to your participation in the One Cleanup Program per your wish to select this option within the NIR.

The project managers for your facility are Ayman Ghobrial, DEP and Kevin Bilash, EPA. Their job is to work with you to coordinate the review and approval process to make certain that the requirements of both programs are met. The DEP project manager will have the overall lead, while EPA will be responsible for addressing RCRA issues, including a determination of the environmental indicators for human health and groundwater control.

Upon completion and submittal of the Site Wide Approach Work Plan, all parties will discuss the appropriate next steps and schedules. Where possible, we will rely on Act 2's Statewide Health or site specific options to develop a remedy. We also plan to follow Act 2 time frames as much as possible. If these options do not fully satisfy RCRA requirements, we expect the parties to develop an acceptable alternative.

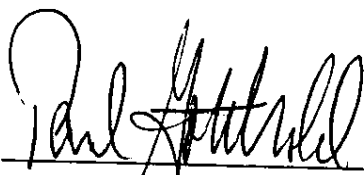
Once agreement is reached on any necessary cleanup, EPA will publish a draft Final Decision for public input and proceed to a final Decision using EPA's *Final Guidance on Completion of Corrective Action Activities at RCRA Facilities*, which can be found in the

February 23, 2003 *Federal Register*. DEP will proceed with a review and an approval decision on the Act 2 reports as provided in Act 2, Sections 302(e), 303(h) and 304(n). Responsibility for any post-remedial measures or institutional controls will be determined by the joint work team on a facility-specific basis in order to ensure the needs of both programs are met.

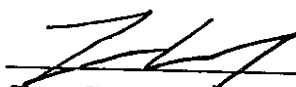
For your convenience, the full text of the MOA can be found at the following link:
<http://www.epa.gov/region03/revitalization/pennsylvania.htm>

EPA and DEP thank you for participating in this program. For more information please contact Ayman Ghobrial, DEP at (484) 250-5781 or Kevin Bilash, EPA at (215) 814-2796.

Sincerely,



Paul Gotthold, Associate Director
Land & Chemicals Division
Region III
US Environmental Protection Agency



Troy Conrad, Director
Land Recycling Program
Department of Environmental Protection

cc: Walter Payne, PADEP
David Burke, PADEP
Ayman Ghabrial, PADEP
Kevin Bilash, EPA
Colleen Costello, Langan Engineering & Environmental
file



Appendix B

Public Involvement Plan

Appendix B
Public Involvement Plan
Site Wide Approach Work Plan
Sunoco Marcus Hook Refinery
Marcus Hook, Pennsylvania

Introduction

This Public Involvement Plan (PIP) has been developed as a component of the Work Plan for Site Wide Approach Under the One Cleanup Program (Site Wide Approach Work Plan) for Sunoco's Marcus Hook Refinery. This PIP is intended to address public involvement for work done under the One Cleanup Program.

Background

In April 2004, the Pennsylvania Department of Environmental Protection (PADEP) and the Region III United States Environmental Protection Agency (EPA Region III) signed an agreement entitled "One Cleanup Program Memorandum of Agreement (MOA or One-Cleanup Program)," which clarifies how sites remediated under Pennsylvania's Act 2 program may satisfy Resource, Conservation and Recovery Act (RCRA) corrective action requirements through characterization and attainment of Act 2 remediation standards pursuant to Pennsylvania's Act 2. The proposed approach is to collaboratively develop a site wide approach program for the refinery utilizing the One Cleanup Program approach. The One Cleanup Program is a model program that would benefit the stakeholders by merging the remediation obligations under the various federal and state programs into one streamlined approach.

Sunoco submitted a Pennsylvania Act 2 Notice of Intent to Remediate (NIR) for the refinery to the PADEP on September 15, 2011. Submittal of the NIR formally entered the Pennsylvania portions of the refinery into the Pennsylvania Act 2 Program and acknowledged Sunoco's intent to enter the refinery into a One Cleanup Program. The refinery was officially entered into the One Cleanup Program in November 2011. A copy of the NIR, the associated municipal and public notices and the One Cleanup Program acceptance letter are included in Appendix A of the Site Wide Approach Work Plan. The One Cleanup Program will serve as the regulatory program governing site wide remedial activities at the refinery, including those portions of the refinery situated in Pennsylvania and Delaware. One Cleanup Program activities undertaken in portions of the Facility situated in Pennsylvania will be performed under the regulatory lead of the PADEP. One Cleanup Program activities undertaken in portions of the Facility

situated in Delaware will be performed under the regulatory lead of EPA Region III, in coordination with the Delaware Department of Natural Resources and Environmental Control (DNREC), as appropriate.

Public Involvement Plan

For portions of the refinery situated in Pennsylvania, Act 2 Report submittals will satisfy the appropriate municipal and public notice requirements in accordance with the provisions of Act 2. Notices will be published in the Pennsylvania Bulletin and a summary of the notice will appear in at least one local newspaper. As part of the PIP, Sunoco intends to hold an initial public meeting and subsequent meetings on an as-needed basis upon request to give status updates of the project. For the entire refinery, including those portions situated in Delaware, EPA will complete additional public involvement through activities, such as notices under the Corrective Action Program and by updating its online Fact Sheet for the refinery.

Availability of Public Documents

Reports submitted to the agencies will be available for public review through the Marcus Hook Public Library located at 10th and Green Streets in Marcus Hook, Pennsylvania. The contact person for any questions regarding any aspect of Sunoco's Marcus Hook Refinery Remediation Program is Carol Ziegler, Public Relations Director for Sunoco. Carol can be reached at (610) 859-1071 or casloan@sunocoinc.com.

Public Information Session

A public meeting will be held in the Borough of Marcus Hook to give an overview of the project. Sunoco will advertise the notice for a public information session in the Delaware County Daily Times newspaper a minimum 30 days prior to the date of the meeting. Sunoco will notify the Environmental Advisory Council of the meeting and seek their attendance. Sunoco will provide the Marcus Hook Community Center at 7 West Delaware Avenue, Marcus Hook, Pennsylvania or a suitable alternate location.

Sunoco will provide a facilitator for the meeting so the meeting can be conducted in an orderly manner and to ensure that affected organizations/individuals will have an opportunity to speak and be heard. A Sunoco representative will make a presentation to those gathered about the status of the project. The Sunoco representative will be supported by other Sunoco employees, and third party experts, as Sunoco deems necessary to answer questions.

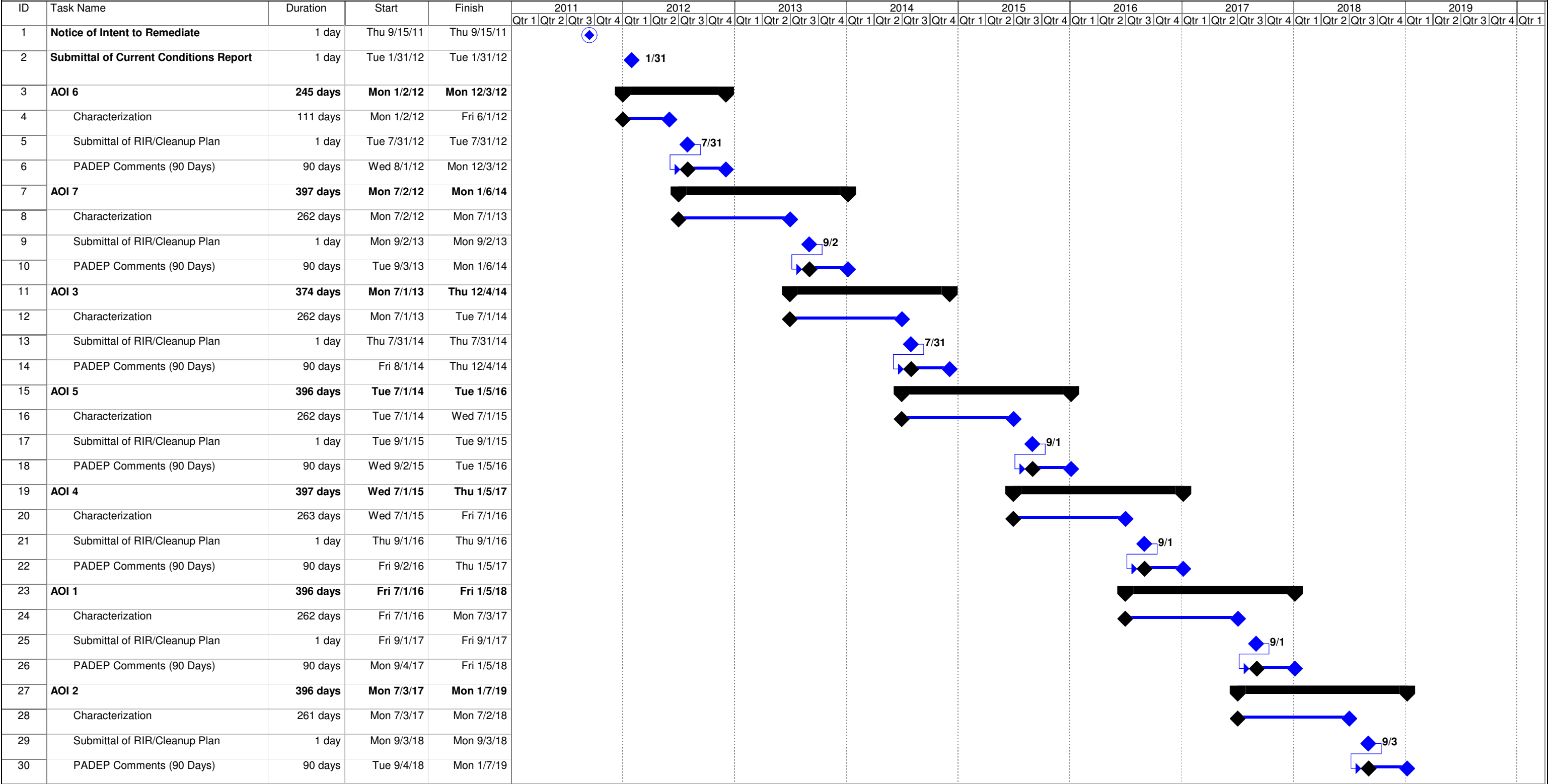
Proposed Initial Meeting Agenda

- Upon entering the public meeting facility, attendees will be asked to sign in.
- Those wishing to make formal statements will sign in separately and will be called to speak in the order of their arrival.
- Sunoco Public Affairs representative and a federal/state representative will welcome everyone to the gathering and introduce the panel from each of their organizations.
- The facilitator will introduce the format and advise all in attendance of the Ground Rules for the evening.
- Sunoco will make its Presentation.
- Statements/questions from the organizations gathered will be taken in order of their arrival.
- Questions from the general audience for the panel will be heard after the organizations.
- Adjournment.

Appendix C



Implementation Schedule

Appendix C
Implementation Schedule
Site Wide Approach Work Plan
Marcus Hook Refinery
Marcus Hook, Pennsylvania




Task

Split





Progress

Milestone




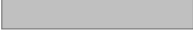
Summary

Project Summary



External Tasks

External Milestone



Deadline

Completed

